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09/635,141	08/09/2000	Mitsunori Nodono	Q60353	5577

7590 04/18/2005

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EXAMINER

COLE, ELIZABETH M

ART UNIT PAPER NUMBER

1771

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/635,141  
Filing Date: August 09, 2000  
Appellant(s): NODONO ET AL.

\_\_\_\_\_  
Sheldon Landsman  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 1/18/05.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection is correct.

**NEW GROUND(S) OF REJECTION**

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al in view of DE 2,532,406 and Kelch, U.S. Patent No. 5,000,992 as applied to claims 11, 13-18 above and further in view of EP 0,0925,900 A1.

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**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

<b>EP 0,925,900 A1</b>	<b>Kitayama et al</b>	<b>6-1999</b>
<b>5,180,751</b>	<b>Park et al</b>	<b>01-1993</b>
<b>DE 2,532,406</b>	<b>Dynamit Nobel</b>	<b>4-1978</b>
	<b>Akitengesellschaft</b>	
<b>5,000,992</b>	<b>Kelch</b>	<b>3-1991</b>

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 6-8, 12, 28-31 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al, U.S. Patent NO. 5,180, 751 in view of DE 2,532,406. Park et al discloses a method of making a multilayer polypropylene foam sheet comprising

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the steps of melting the polypropylene resin, adding a blowing agent to the resin and extruding the resin to form a foamed sheet. Park et al discloses that an additional layer may be extruded onto the foamed sheet wherein the layer can be anon-foamed polypropylene. The second layer may be extruded onto the foamed layer as the foamed layer is extruded. The foamed layer may be extruded from a circular die so that it forms a cylinder. The cylinder may be split to form sheets. The extruded foam may be have a gas barrier layer bonded to it, in addition to the non-foamed polypropylene layer. The extruded foam may be sized by passing it over a sizing drum. See col. 7, line 63 – col. 8, line 57. Parks does not teach that the folded material may be cut, folded and bonded to each other. DE 2,532,406 teaches that sheets of foam may be folded and bonded to each other in order to form laminated foams. Therefore, it would have been obvious to have folded the foams of Parks rather than cutting the layers and then bonding them. One of ordinary skill in the art would have been motivated to fold and bond rather than cut because DE 2,532,406 teaches that this is an alternative and known method of making a bonded foam material and because this would avoid the step of cutting the foam, thereby reducing costs by simplifying the process.

Claims 11, 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al in view of DE 2,532,406 as applied to claims 6-8,12,28-31 and 48 above, and further in view of Kelch, U.S. Patent NO. 5,000,992. Park et al teaches a multilayered foam laminate which may comprise as barrier layers. Park et al does not teach laminating the foam laminate to additional preformed layers. Kelch teaches that

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multi-layered foam materials may be laminated to additional materials including foils, films and combinations thereof. See col. 4, lines 44-61. These materials would inherently act as a gas barrier layer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have laminated the material of Park et al to additional layers as taught by Kelch. One of ordinary skill in the art would have been motivated to bond the Park et al structure to additional layers as taught by Kelch in order to further enhance the properties of the multi-layered material.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al in view of DE 2,532,406 and Kelch, U.S. Patent No. 5,000,992 as applied to claims 11, 13-18 above and further in view of EP 0,0925,900 A1. Park et al differs from the claimed invention because while Park does teach a step of incising the formed foam cylinder to form a foam sheet, Park does not teach incising at two points in order to form two foam sheets. EP '900 teaches at page 12, lines 39-43 that extruded foam cylinders may be cut by a cutter which cuts in the direction of extrusion. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incised the extruded foam cylinder of Park et al by employing a cutter which slit across the foam in the direction of extrusion because this would allow the cutting of the foam to be performed in line with the extrusion process. Employing the cutter of EP '900 would necessarily produce a cylinder which was incised at two points.

**(10) Response to Argument**

Appellant argues that Park et al do not disclose or suggest a laminating step. However, the instant claims and specification do not define laminating. In the absence of such a definition, the dictionary definition of laminating is used. Webster's Ninth New Collegiate Dictionary defines laminate "as to unite (layers of material) by an adhesive or other means". Park et al clearly teaches uniting the foam layer with other layers such as functional layers and tie layers. See col. 9, lines 40-56. Appellant seems to be arguing that Park et al does not teach a particular type of laminating, but, since neither the claims nor the specification teach a particular method of laminating and since Park et al clearly teaches uniting the foamed layers with additional layers, Park et al clearly teaches a laminating step.

With regard to claim 7, Appellant argues that the DE '406 does not teach laminating but instead teaches overlapping the ends of a strip to form a butt joint and that this is different from the superimposing and laminating steps of claim 7. However, DE '406 clearly teaches the claimed steps in that DE '406 clearly teaches folding the foamed sheet, superimposing the edges and then bonding. Claim 7 does not require that the bonding take place across the entire surface of the foam sheet and does not require a particular method of laminating. The disclosure of DE '406 teaches what is claimed because it teaches folding, superimposing and laminating, (i.e., bonding).

Appellant argues that DE ;406 does not employ the word laminating. However, as set forth above, laminating means to unit layers of a material by an adhesive or by

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other means. DE '406 teaches uniting layers of material. Therefore, DE '406 teaches laminating.

Appellant argues that the goal of DE '406 is the formation of a tube, not the formation of a laminate. However, the instant claims do not specify the structure of the laminate formed. DE '406 teaches the manipulative steps which are claimed. The claims do not recite the structure of the formed laminate, how far the bonded areas extend across the surface of the foam, etc.

With regard to the argument that DE '406 is drawn to a single layer embodiment while Park is drawn to a multilayered embodiment, since both references are drawn to method of forming and shaping thermoplastic foam materials, it is the examiner's position that one of ordinary skill in the art would have recognized that a multi-layered material as set forth in Park could also be folded and bonded to form a laminated material.

With regard to claim 12, Park et al teaches applying a gas barrier resin layer to the foamed sheet. See col. 8, lines 44-57. Since the gas barrier layer is a layer which is united to another layer, (the foam layer), Park et al teaches laminating the gas barrier layer onto the foam layer.



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With regard to claims 10, 11 and 13-18, Appellant again argues that DE '406 does not teach laminating. As set forth above, since DE '406 teaches bonding layers DE '406 teaches a laminating step. The instant claims are not specific as to how much of the foam surfaces are bonded, exactly how the laminating step is performed, etc. Therefore, since the claims recite "laminating" and DE '406 discloses uniting layers by bonding, DE '406 teaches laminating.

As set forth above, with regard to the argument that DE '406 is drawn to a single layer embodiment while Park is drawn to a multilayered embodiment, since both references are drawn to method of forming and shaping thermoplastic foam materials, it is the examiner's position that one of ordinary skill in the art would have recognized that a multi-layered material as set forth in Park could also be folded and bonded to form a laminated material.

With regard to the argument that Park et al does not teach laminating a gas barrier layer, Park et al clearly teaches uniting the foam layer to gas barrier layers at col. 8, lines 44-57.

With regard to claim 10 and the step of incising the foam at two points, this argument is moot in view of the new grounds of rejection.

With regard to claim 11, Park et al teaches at col. 11, lines 58 – 64 that two layers of the foamed sheet can be laminated with other layers such as gas barrier layers which can be disposed between the two layers of foam sheet. The foam sheet of Park which sandwiches the gas barrier layer is multi-layered in that it comprises a skin layer of non-foamed material. See col. 11, lines 28-43.

Appellant argues that Kelch does not teach the incising step of employing two multilayer polyolefin foamed sheets. However, Kelch was not cited to show these elements but only to show that such foamed sheets could be bonded with other layers such as foils and films. As set forth above, Park et al already teaches two multi-layered polyolefin foam sheets which can be bonded to other layers such as gas barrier layers.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

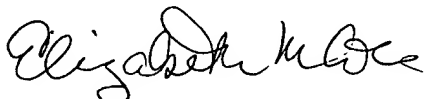
(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of

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rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,



Elizabeth M. Cole  
Primary Examiner

A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:

Conferees:

Terrel Morris - *Tm*

Rena Dye - *RD*

Approved



Jacqueline M. Stone, Director  
Technology Center 1700